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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,313	09/21/2006	Thomas Friedlaender	30071/41841	3782

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EXAMINER	
TISCHLER, FRANCES	
ART UNIT	PAPER NUMBER
1796	

MAIL DATE	DELIVERY MODE
04/16/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/575,313	FRIEDLAENDER ET AL.	
	Examiner	Art Unit	
	FRANCES TISCHLER	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 January 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,12 and 13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,12 and 13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/22/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The claim objections not discussed below are deemed withdrawn. The 35 USC 102 rejection over Van Erden et al has been withdrawn in view of Applicant's amendment.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Claims 1, 2, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Robinson et al (US 6,376,563).

The rejection is maintained as per reasons of record as stated in the previous office action of 9/29/08.

Robinson discloses (abstract, figure 1A) a method of reprocessing used PET beverage bottles where the bottles are shredded into flakes and chunks, reading into applicant's claim 1a). The flakes are derived from the thin wall portion of the bottles while the chunks are derived from the thick neck portion of the bottles (6:24 – 31). The shredded material is subjected to a floatation segregation process, which separates foreign plastic flakes, such as polyethylene or polypropylene plastic flakes, that may be present from the PET flakes by bulk density techniques (6:31 – 38), reading on applicant's claim 1b) and claim 2. The PET flakes and chunks are then subjected to a wash cycle within a caustic solution to remove other impurities, subjected to another floatation segregation to remove those impurities and then dried (6:39 – 62), reading on applicant's claim 1c) ***and (former) claim 11*** of industrial treatment and decontamination treatment.

The thick and denser chunk portion/neck of the shredded bottles and the thin flake portion/wall of the shredded bottles are separated with a Forsberg Destoner (www. Forsbergs.com), which works upon vibrational and fluidization, air classifier, principles whereby separation occurs between the more and the less dense materials (8:24 – 51), reading on applicant's claims 6 and 7.

Claim Rejections - 35 USC § 102/103

Claims 3, 12 and 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Robinson et al (US 6,376,563).

The rejection is maintained as per reasons of record as stated in the previous office action of 9/29/08.

Robinson's disclosure is discussed above and is incorporated herein by reference.

Robinson is silent on the percentage of thick and thin materials that are separated, as claimed by applicant in claims 3, 12 and 13. However, since Robinson uses the same technique of separating the thick and thin particles of PET bottles as claimed applicant, it can be assumed that the % separation achieved is inherently the same as claimed by applicant. Alternatively, the pneumatic table/destoner can also be optimized (through vibration strength, air flow rate and strength, process duration, etc.) until the desired % separation is achieved. The case law has held that "A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. In re Antonie, 559 F.2d618, 195 USPQ 6 (CCPA 1977). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have varied the pneumatic table/destoner settings as necessary through routine optimization to obtain the desired % separation between the thin and thick particles.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson et al (US 6,376,563) in view of Van Erden et al (US 6,288,131).

Robinson's disclosure is discussed above and is incorporated herein by reference.

Van Erden discloses (abstract, figure 1A) a method of reprocessing used PET beverage bottles where the bottles are shredded into flakes and chunks, reading into applicant's claim 1a). The flakes are derived from the thin wall portion of the bottles while the chunks are derived from the thick neck portion of the bottles (5:36 – 40). The chopped material is subjected to a floatation segregation process, which separates

foreign plastic flakes, such as polyethylene or polypropylene plastic flakes, that may be present from the PET flakes by bulk density techniques (5:40 – 47), reading on applicant's claim 1b) and claim 2. The PET wall flakes and the neck chunks are then passed through a pair of flattening rolls, which permit the wall flake portion to pass through the nip of the flattering rolls undisturbed while flattening the neck chunk portions. Van Erden discloses that said process alters the chunk portions to resemble the wall flake portions (6:58 – 63), which is equivalent to applicant's claim 4 of re-shredding of the thick walled parts since in both cases the thick walled portions are made smaller to resemble the thin walled portion. Afterwards, the thin and flattened flakes are combined, reading on Applicant's claim 5 of combining the two portions. The flakes are further processed by air blasting, by heating and by solid state polymerization.

Robinson discards the thick walled/neck particles of PET, the reason for which being that these non-crystalline particles react slowly, if at all, within the solid state polymerization process in connection with building up the intrinsic viscosity of the materials being processed. They also form clumps upon heating and jam the feeder or other components of the apparatus (7:64 – end, 8:1 – 31). Van Erden discloses the same method of reprocessing used PET bottles but flattens the thick walled particles to the size and shape of the thin walled particles for the same purpose of having them behave like the thin walled flakes for the purpose of sold state polymerization (6:58 – end, 7:1 – 11). Therefore, it would have been obvious to one of ordinary skill in the art to have replaced Robinson's method of discarding the thick walled particles with Van Erden's method of flattening them to resemble the thin walled particles for the same purpose of having particles of uniform size and density to go through solid state polymerization by reacting well and timely and not causing side effect such as clumping or clogging of the apparatus being used for the solid stating.

Response to Arguments

Applicant's arguments filed 1/27/09 have been fully considered but they are not persuasive.

Applicant submits that neither Robinson nor Van Erden disclose or suggest a PET reprocessing treatment including a decontamination treatment or a treatment of two partial quantities of sorted materials and that the only after-treatment is a solid state polymerization. Applicant also submits that the previous claim 11 was not discussed in the office action.

Examiner underlined, above, the section of the previous office action of 9/29/08 where claim 11 was discussed. The PET flakes and chunks are subjected to a wash cycle in a caustic solution to remove other impurities, subjected to another floatation segregation to remove those impurities and then dried (6:39 – 62), reading on applicant's claim 1c) (and the previous claim 11) of industrial reprocessing treatment and decontamination treatment. Both Robinson and Van Erden sort thin and thick walled PET, which reads on Applicant's at least two partial quantities of sorted materials. Van Erden further reprocesses the thick walled part of the PET bottle and adds it to the thin walled flakes. Robinson washes the flakes in caustic solution, therefore decontaminating it. The prior art thus reads on Applicant's claims. The fact that Robinson or Van Erden further treat the decontaminated flakes to a solid state polymerization is immaterial to the examination since Applicant is not claiming what to do with the PET flakes after flaking, sorting and decontaminating.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANCES TISCHLER whose telephone number is (571)270-5458. The examiner can normally be reached on Monday-Friday 7:30AM - 5:00 PM; off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Irina S. Zemel/ Frances Tischler

Primary Examiner, Art Unit 1796

Examiner
Art Unit 1796

/FT/